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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,743	11/09/2006	Roberto A. Macina	DEX-0552	4777

32800 7590 09/24/2008

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EXAMINER	
MARTINELL, JAMES	
ART UNIT	PAPER NUMBER
1634	

NOTIFICATION DATE	DELIVERY MODE
09/24/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

poreilly@licataandtyrrell.com

Office Action Summary	Application No.	Applicant(s)	
	10/537,743	MACINA ET AL.	
	Examiner	Art Unit	
	James Martinell	1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) *11-14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 15-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/6/05 & 12/3/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Applicant's election with traverse of the requirement for restriction in the reply filed on August 19, 2008 is acknowledged. The traversal is on the ground(s) that a search of the art relating to an elected nucleic acid should reveal art relating to all claims . This is not found persuasive because the searches of the three Groups of inventions are not co-extensive. It is noted that applicants did not argue against the selection of a single sequence for examination on the merits.

The requirement is still deemed proper and is therefore made FINAL.

Claims 11-14, 15 (insofar as it is drawn to polypeptide assays) and 16-18 (insofar as they are drawn to kits containing polypeptides (claim 16), methods of treatment using polypeptides (claim 17), and polypeptide vaccines (claim 18)) are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 19, 2008.

No copy of WO 042393, cited in the Information Disclosure Statement filed December 3, 2007, is in the file. However, since the reference was readily available to the USPTO, it has been considered.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 and 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are vague and indefinite.

(a) Claims 1-10 and 15-18 are vague and indefinite because they claim more than was elected. Claims 1, 15, 16, and 17 are drawn to or require the use of more than one selected nucleic acid sequence. Claims 15, 16, and 18 are

drawn to non-elected methods of using polypeptides, Kits containing polypeptides, and polypeptide vaccines.

(b) Claims 1, 15, and 17 are vague and indefinite because one cannot know any particular percent sequence identity to a nucleic acid that encodes a given polypeptide sequence because of the degeneracy of the genetic code.

Claims 1-10 and 15-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Because one cannot know any particular percent sequence identity to a nucleic acid that encodes a given polypeptide sequence because of the degeneracy of the genetic code, the claims lack an adequate written description in that not enough structure is recited such that one of skill in the art would consider applicants to be in possession of the claimed invention as of the effective filing date of the claims.

In *Vas-Cath v Mahurkar*, 19 USPQ2d 1111 (Fed. Cir. 1991) the court stated, "applicant must also convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession *of the invention*. The invention is, for purposes of the 'written description' inquiry, *whatever is now claimed*" (emphasis in the original) (*Vas-Cath* at page 1117). The instant application does not "clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is now claimed" (*Vas-Cath* at page 1116). In *Fiers v. Sugano*, 25 USPQ2d 1601 (Fed. Cir. 1993), the court also held that, "An adequate written description of a DNA requires more than a mere statement that it is part of the invention and reference a potential method for isolating it; what is required is a description of the DNA itself" (*Fiers v. Sugano*, page 1606). This view was reiterated in *Fiddes v. Baird*, USPQ2d 1481 (BPAI 1993) at page 1483, "If a conception of a DNA requires a specific definition, such as by structure, formula, chemical name, or physical properties, as we have held, then a description also requires that degree of specificity. . . . one cannot describe what one has not conceived." The court amplified this

notion with respect to inventions claiming genetic material in *Regents of the University of California v. Eli Lilly*, 43 USPQ2d 1398 (Fed. Cir. 1997), stating at page 1406,

> "In claims to genetic material, however, a generic statement such as 'vertebrate insulin cDNA' or mammalian insulin cDNA,' without more, is not an adequate written description of the genus because it does not distinguish the claimed genus from others, except by function. It does not specifically define any of the genes that fall within its definition. It does not define any structural features commonly possessed by members of the genus that distinguish them from others. One skilled in the art therefore cannot, as one can do with a fully described genus, visualize or recognize the identity of the members of the genus. . . . Accordingly, naming a type of material generally known to exist, in the absence of knowledge as to what that material consists of, is not a description of that material."

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10 and 15-18 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Mitcham et al (WO 00/36107 (June 23, 2000)). Mitcham et al discloses a nucleic acid (SEQ ID NO: 391) that hybridizes to SEQ ID NO: 109 of the instant application (see the alignment below). Mitcham et al also teaches the use of the nucleic acid as a marker for ovarian cancer, treatment of ovarian cancer, and kits for the detection of ovarian cancer (*e.g.*, see the Abstract, page 28, line 15 through page 29, line 20, page 37, lines 11-23, page 42, line 25 through page 44, line 9, page 45, lines 3-10, and page 46, line 1 through page 51, line 20). SEQ ID NO: 109 has basis in Serial No. 60/484,584 (sequence bridging pages 154-155) and thus the effective filing date of the instant claims is June 30, 2003.

ALIGNMENT OF SEQ ID NO: 109 AND MITCHAM ET AL (WO 00/35107, SEQ ID NO: 391)

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RESULT 2
AAA70077
ID   AAA70077 standard; cDNA; 2627 BP.
XX
AC   AAA70077;
XX
DT   07-NOV-2000  (first entry)
XX
DE   Human ovarian carcinoma antigen polynucleotide SEQ ID NO:391.
XX
KW   Human; ovarian carcinoma; ovarian cancer; therapy; diagnosis;
KW   tumour antigen; identification; cytostatic; gene therapy; vaccine; ss.
XX
OS   Homo sapiens.
XX
PN   WO200036107-A2.
XX
PD   22-JUN-2000.
XX
PF   17-DEC-1999;   99WO-US030270.
XX
PR   17-DEC-1998;   98US-00215681.
PR   17-DEC-1998;   98US-00216003.
PR   23-JUN-1999;   99US-00338933.
PR   24-SEP-1999;   99US-00404879.
XX
PA   (CORI-) CORIXA CORP.
XX
PI   Mitcham JL,  King GE,  Algate PA,  Frudakis TN;
XX
DR   WPI; 2000-431589/37.
XX
PT   Immunogenic portion of an ovarian carcinoma protein and the nucleic acid
PT   encoding it, useful for the diagnosis, prevention and treatment of
PT   cancer, preferably ovarian cancer.
XX
PS   Claim 1; Page 204-205; 299pp; English.
XX
CC   The present invention describes an isolated polypeptide comprising an
CC   immunogenic portion of an ovarian carcinoma protein (or its variants).
CC   Ovarian carcinoma proteins, and polynucleotides encoding them, have
CC   cytostatic activity and can be used in gene therapy and vaccines. Ovarian
CC   carcinoma polypeptides, nucleic acids, antibodies and vaccines are useful
CC   for the prevention, diagnosis and treatment of cancer, preferably ovarian
CC   cancer. AAA69691 to AAA70077 and AAB12552 to AAB12557 represent human
CC   ovarian carcinoma polynucleotides and proteins used in the
CC   exemplification of the present invention
XX
SQ   Sequence 2627 BP; 754 A; 605 C; 584 G; 684 T; 0 U; 0 Other;
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Query Match             90.5%;  Score 2434;  DB 3;  Length 2627;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches 2434;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        257 CAGGGAGACACTCCATCACAGTCACTACTGTCGCCTCAGCTGGGAACATTGGGGAGGATG 316
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        177 CAGGGAGACACTCCATCACAGTCACTACTGTCGCCTCAGCTGGGAACATTGGGGAGGATG 236

Qy        317 GAATCCTGAGCTGCACTTTTGAACCTGACATCAAACTTTCTGATATCGTGATACAATGGC 376
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        237 GAATCCTGAGCTGCACTTTTGAACCTGACATCAAACTTTCTGATATCGTGATACAATGGC 296

Qy        377 TGAAGGAAGGTGTTTTAGGCTTGGTCCATGAGTTCAAAGAAGGCAAAGATGAGCTGTCGG 436
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        297 TGAAGGAAGGTGTTTTAGGCTTGGTCCATGAGTTCAAAGAAGGCAAAGATGAGCTGTCGG 356

Qy        437 AGCAGGATGAAATGTTCAGAGGCCGGACAGCAGTGTTTGCTGATCAAGTGATAGTTGGCA 496
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        357 AGCAGGATGAAATGTTCAGAGGCCGGACAGCAGTGTTTGCTGATCAAGTGATAGTTGGCA 416

Qy        497 ATGCCTCTTTGCGGCTGAAAAACGTGCAACTCACAGATGCTGGCACCTACAAATGTTATA 556
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        417 ATGCCTCTTTGCGGCTGAAAAACGTGCAACTCACAGATGCTGGCACCTACAAATGTTATA 476

Qy        557 TCATCACTTCTAAAGGCAAGGGGAATGCTAACCTTGAGTATAAAACTGGAGCCTTCAGCA 616
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        477 TCATCACTTCTAAAGGCAAGGGGAATGCTAACCTTGAGTATAAAACTGGAGCCTTCAGCA 536

Qy        617 TGCCGGAAGTGAATGTGGACTATAATGCCAGCTCAGAGACCTTGCGGTGTGAGGCTCCCC 676
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        537 TGCCGGAAGTGAATGTGGACTATAATGCCAGCTCAGAGACCTTGCGGTGTGAGGCTCCCC 596

Qy        677 GATGGTTCCCCCAGCCCACAGTGGTCTGGGCATCCCAAGTTGACCAGGGAGCCAACTTCT 736
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        597 GATGGTTCCCCCAGCCCACAGTGGTCTGGGCATCCCAAGTTGACCAGGGAGCCAACTTCT 656

Qy        737 CGGAAGTCTCCAATACCAGCTTTGAGCTGAACTCTGAGAATGTGACCATGAAGGTTGTGT 796
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        657 CGGAAGTCTCCAATACCAGCTTTGAGCTGAACTCTGAGAATGTGACCATGAAGGTTGTGT 716

Qy        797 CTGTGCTCTACAATGTTACGATCAACAACACATACTCCTGTATGATTGAAAATGACATTG 856
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        717 CTGTGCTCTACAATGTTACGATCAACAACACATACTCCTGTATGATTGAAAATGACATTG 776

Qy        857 CCAAAGCAACAGGGGATATCAAAGTGACAGAATCGGAGATCAAAAGGCGGAGTCACCTAC 916
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        777 CCAAAGCAACAGGGGATATCAAAGTGACAGAATCGGAGATCAAAAGGCGGAGTCACCTAC 836

Qy        917 AGCTGCTAAACTCAAAGGCTTCTCTGTGTGTCTCTTCTTTCTTTGCCATCAGCTGGGCAC 976
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        837 AGCTGCTAAACTCAAAGGCTTCTCTGTGTGTCTCTTCTTTCTTTGCCATCAGCTGGGCAC 896

Qy        977 TTCTGCCTCTCAGCCCTTACCTGATGCTAAAATAATGTGCCTTGGCCACAAAAAAGCATG 1036
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        897 TTCTGCCTCTCAGCCCTTACCTGATGCTAAAATAATGTGCCTTGGCCACAAAAAAGCATG 956

Qy       1037 CAAAGTCATTGTTACAACAGGGATCTACAGAACTATTTCACCACCAGATATGACCTAGTT 1096
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        957 CAAAGTCATTGTTACAACAGGGATCTACAGAACTATTTCACCACCAGATATGACCTAGTT 1016
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Qy       1097 TTATATTTCTGGGAGGAAATGAATTCATATCTAGAAGTCTGGAGTGAGCAAACAAGAGCA 1156
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1017 TTATATTTCTGGGAGGAAATGAATTCATATCTAGAAGTCTGGAGTGAGCAAACAAGAGCA 1076

Qy       1157 AGAAACAAAAAGAAGCCAAAAGCAGAAGGCTCCAATATGAACAAGATAAATCTATCTTCA 1216
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1077 AGAAACAAAAAGAAGCCAAAAGCAGAAGGCTCCAATATGAACAAGATAAATCTATCTTCA 1136

Qy       1217 AAGACATATTAGAAGTTGGGAAAATAATTCATGTGAACTAGACAAGTGTGTTAAGAGTGA 1276
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1137 AAGACATATTAGAAGTTGGGAAAATAATTCATGTGAACTAGACAAGTGTGTTAAGAGTGA 1196

Qy       1277 TAAGTAAAATGCACGTGGAGACAAGTGCATCCCCAGATCTCAGGGACCTCCCCCTGCCTG 1336
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1197 TAAGTAAAATGCACGTGGAGACAAGTGCATCCCCAGATCTCAGGGACCTCCCCCTGCCTG 1256

Qy       1337 TCACCTGGGGAGTGAGAGGACAGGATAGTGCATGTTCTTTGTCTCTGAATTTTTAGTTAT 1396
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1257 TCACCTGGGGAGTGAGAGGACAGGATAGTGCATGTTCTTTGTCTCTGAATTTTTAGTTAT 1316

Qy       1397 ATGTGCTGTAATGTTGCTCTGAGGAAGCCCCTGGAAAGTCTATCCCAACATATCCACATC 1456
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1317 ATGTGCTGTAATGTTGCTCTGAGGAAGCCCCTGGAAAGTCTATCCCAACATATCCACATC 1376

Qy       1457 TTATATTCCACAAATTAAGCTGTAGTATGTACCCTAAGACGCTGCTAATTGACTGCCACT 1516
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1377 TTATATTCCACAAATTAAGCTGTAGTATGTACCCTAAGACGCTGCTAATTGACTGCCACT 1436

Qy       1517 TCGCAACTCAGGGGCGGCTGCATTTTAGTAATGGGTCAAATGATTCACTTTTTATGATGC 1576
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1437 TCGCAACTCAGGGGCGGCTGCATTTTAGTAATGGGTCAAATGATTCACTTTTTATGATGC 1496

Qy       1577 TTCCAAAGGTGCCTTGGCTTCTCTTCCCAACTGACAAATGCCAAAGTTGAGAAAAATGAT 1636
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1497 TTCCAAAGGTGCCTTGGCTTCTCTTCCCAACTGACAAATGCCAAAGTTGAGAAAAATGAT 1556

Qy       1637 CATAATTTTAGCATAAACAGAGCAGTCGGCGACACCGATTTTATAAATAAACTGAGCACC 1696
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1557 CATAATTTTAGCATAAACAGAGCAGTCGGCGACACCGATTTTATAAATAAACTGAGCACC 1616

Qy       1697 TTCTTTTTAAACAAACAAATGCGGGTTTATTTCTCAGATGATGTTCATCCGTGAATGGTC 1756
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1617 TTCTTTTTAAACAAACAAATGCGGGTTTATTTCTCAGATGATGTTCATCCGTGAATGGTC 1676

Qy       1757 CAGGGAAGGACCTTTCACCTTGACTATATGGCATTATGTCATCACAAGCTCTGAGGCTTC 1816
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1677 CAGGGAAGGACCTTTCACCTTGACTATATGGCATTATGTCATCACAAGCTCTGAGGCTTC 1736

Qy       1817 TCCTTTCCATCCTGCGTGGACAGCTAAGACCTCAGTTTTCAATAGCATCTAGAGCAGTGG 1876
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1737 TCCTTTCCATCCTGCGTGGACAGCTAAGACCTCAGTTTTCAATAGCATCTAGAGCAGTGG 1796

Qy       1877 GACTCAGCTGGGGTGATTTCGCCCCCCATCTCCGGGGGAATGTCTGAAGACAATTTTGGT 1936
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1797 GACTCAGCTGGGGTGATTTCGCCCCCCATCTCCGGGGGAATGTCTGAAGACAATTTTGGT 1856

Qy       1937 TACCTCAATGAGGGAGTGGAGGAGGATACAGTGCTACTACCAACTAGTGGATAAAGGCCA 1996
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1857 TACCTCAATGAGGGAGTGGAGGAGGATACAGTGCTACTACCAACTAGTGGATAAAGGCCA 1916
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Qy       1997 GGGATGCTGCTCAACCTCCTACCATGTACAGGACGTCTCCCCATTACAACTACCCAATCC 2056
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1917 GGGATGCTGCTCAACCTCCTACCATGTACAGGACGTCTCCCCATTACAACTACCCAATCC 1976

Qy       2057 GAAGTGTCAACTGTGTCAGGACTAAGAAACCCTGGTTTTGAGTAGAAAAGGGCCTGGAAA 2116
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1977 GAAGTGTCAACTGTGTCAGGACTAAGAAACCCTGGTTTTGAGTAGAAAAGGGCCTGGAAA 2036

Qy       2117 GAGGGGAGCCAACAAATCTGTCTGCTTCCTCACATTAGTCATTGGCAAATAAGCATTCTG 2176
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2037 GAGGGGAGCCAACAAATCTGTCTGCTTCCTCACATTAGTCATTGGCAAATAAGCATTCTG 2096

Qy       2177 TCTCTTTGGCTGCTGCCTCAGCACAGAGAGCCAGAACTCTATCGGGCACCAGGATAACAT 2236
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2097 TCTCTTTGGCTGCTGCCTCAGCACAGAGAGCCAGAACTCTATCGGGCACCAGGATAACAT 2156

Qy       2237 CTCTCAGTGAACAGAGTTGACAAGGCCTATGGGAAATGCCTGATGGGATTATCTTCAGCT 2296
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2157 CTCTCAGTGAACAGAGTTGACAAGGCCTATGGGAAATGCCTGATGGGATTATCTTCAGCT 2216

Qy       2297 TGTTGAGCTTCTAAGTTTCTTTCCCTTCATTCTACCCTGCAAGCCAAGTTCTGTAAGAGA 2356
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2217 TGTTGAGCTTCTAAGTTTCTTTCCCTTCATTCTACCCTGCAAGCCAAGTTCTGTAAGAGA 2276

Qy       2357 AATGCCTGAGTTCTAGCTCAGGTTTTCTTACTCTGAATTTAGATCTCCAGACCCTTCCTG 2416
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2277 AATGCCTGAGTTCTAGCTCAGGTTTTCTTACTCTGAATTTAGATCTCCAGACCCTTCCTG 2336

Qy       2417 GCCACAATTCAAATTAAGGCAACAAACATATACCTTCCATGAAGCACACACAGACTTTTG 2476
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2337 GCCACAATTCAAATTAAGGCAACAAACATATACCTTCCATGAAGCACACACAGACTTTTG 2396

Qy       2477 AAAGCAAGGACAATGACTGCTTGAATTGAGGCCTTGAGGAATGAAGCTTTGAAGGAAAAG 2536
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2397 AAAGCAAGGACAATGACTGCTTGAATTGAGGCCTTGAGGAATGAAGCTTTGAAGGAAAAG 2456

Qy       2537 AATACTTTGTTTCCAGCCCCCTTCCCACACTCTTCATGTGTTAACCACTGCCTTCCTGGA 2596
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2457 AATACTTTGTTTCCAGCCCCCTTCCCACACTCTTCATGTGTTAACCACTGCCTTCCTGGA 2516

Qy       2597 CCTTGGAGCCACGGTGACTGTATTACATGTTGTTATAGAAAACTGATTTTAGAGTTCTGA 2656
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2517 CCTTGGAGCCACGGTGACTGTATTACATGTTGTTATAGAAAACTGATTTTAGAGTTCTGA 2576

Qy       2657 TCGTTCAAGAGAATGATTAAATATACATTTCCTA 2690
              |||||||||||||||||||||||||||||||||
Db       2577 TCGTTCAAGAGAATGATTAAATATACATTTCCTA 2610
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Claims 1-10 and 15-18 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Mitcham et al (U.S. Patent No. 6,468,546). Mitcham et al discloses a nucleic acid (SEQ ID NO: 391) that hybridizes to SEQ ID NO: 109 of the instant application (see the alignment below). Mitcham et al also teaches the use of the nucleic acid as a marker for ovarian cancer, treatment of ovarian cancer, and kits for the detection of ovarian cancer (*e.g.*, see the Abstract, column 8, lines 26-40, column 18, line 34 through column 19, line 51, column 24, lines 36-51, column 28, line 4 through column 29, line 45, and column 30, line 21 through column 33, line 5).

ALIGNMENT OF SEQ ID NO: 109 AND MITCHAM ET AL (U.S. Patent No. 6,468,546, SEQ ID NO: 391)

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RESULT 1
US-09-404-879A-391
; Sequence 391, Application US/09404879A
; Patent No. 6468546
; GENERAL INFORMATION:
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Algate, Paul A.
;  TITLE OF INVENTION:  COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF OVARIAN CANCER
;  FILE REFERENCE:  210121.462C2
;  CURRENT APPLICATION NUMBER: US/09/404,879A
;  CURRENT FILING DATE:  1999-09-24
;  NUMBER OF SEQ ID NOS:  393
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 391
;   LENGTH: 2627
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-404-879A-391

  Query Match             90.5%;  Score 2434;  DB 3;  Length 2627;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches 2434;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        257 CAGGGAGACACTCCATCACAGTCACTACTGTCGCCTCAGCTGGGAACATTGGGGAGGATG 316
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        177 CAGGGAGACACTCCATCACAGTCACTACTGTCGCCTCAGCTGGGAACATTGGGGAGGATG 236

Qy        317 GAATCCTGAGCTGCACTTTTGAACCTGACATCAAACTTTCTGATATCGTGATACAATGGC 376
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Db        237 GAATCCTGAGCTGCACTTTTGAACCTGACATCAAACTTTCTGATATCGTGATACAATGGC 296

Qy        377 TGAAGGAAGGTGTTTTAGGCTTGGTCCATGAGTTCAAAGAAGGCAAAGATGAGCTGTCGG 436
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        297 TGAAGGAAGGTGTTTTAGGCTTGGTCCATGAGTTCAAAGAAGGCAAAGATGAGCTGTCGG 356

Qy        437 AGCAGGATGAAATGTTCAGAGGCCGGACAGCAGTGTTTGCTGATCAAGTGATAGTTGGCA 496
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        357 AGCAGGATGAAATGTTCAGAGGCCGGACAGCAGTGTTTGCTGATCAAGTGATAGTTGGCA 416

Qy        497 ATGCCTCTTTGCGGCTGAAAAACGTGCAACTCACAGATGCTGGCACCTACAAATGTTATA 556
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Db        417 ATGCCTCTTTGCGGCTGAAAAACGTGCAACTCACAGATGCTGGCACCTACAAATGTTATA 476

Qy        557 TCATCACTTCTAAAGGCAAGGGGAATGCTAACCTTGAGTATAAAACTGGAGCCTTCAGCA 616
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Db        477 TCATCACTTCTAAAGGCAAGGGGAATGCTAACCTTGAGTATAAAACTGGAGCCTTCAGCA 536

Qy        617 TGCCGGAAGTGAATGTGGACTATAATGCCAGCTCAGAGACCTTGCGGTGTGAGGCTCCCC 676
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Qy        737 CGGAAGTCTCCAATACCAGCTTTGAGCTGAACTCTGAGAATGTGACCATGAAGGTTGTGT 796
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Db        657 CGGAAGTCTCCAATACCAGCTTTGAGCTGAACTCTGAGAATGTGACCATGAAGGTTGTGT 716

Qy        797 CTGTGCTCTACAATGTTACGATCAACAACACATACTCCTGTATGATTGAAAATGACATTG 856
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Qy        857 CCAAAGCAACAGGGGATATCAAAGTGACAGAATCGGAGATCAAAAGGCGGAGTCACCTAC 916
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Db        777 CCAAAGCAACAGGGGATATCAAAGTGACAGAATCGGAGATCAAAAGGCGGAGTCACCTAC 836

Qy        917 AGCTGCTAAACTCAAAGGCTTCTCTGTGTGTCTCTTCTTTCTTTGCCATCAGCTGGGCAC 976
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        837 AGCTGCTAAACTCAAAGGCTTCTCTGTGTGTCTCTTCTTTCTTTGCCATCAGCTGGGCAC 896

Qy        977 TTCTGCCTCTCAGCCCTTACCTGATGCTAAAATAATGTGCCTTGGCCACAAAAAAGCATG 1036
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Qy       1037 CAAAGTCATTGTTACAACAGGGATCTACAGAACTATTTCACCACCAGATATGACCTAGTT 1096
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Db        957 CAAAGTCATTGTTACAACAGGGATCTACAGAACTATTTCACCACCAGATATGACCTAGTT 1016

Qy       1097 TTATATTTCTGGGAGGAAATGAATTCATATCTAGAAGTCTGGAGTGAGCAAACAAGAGCA 1156
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Qy       1217 AAGACATATTAGAAGTTGGGAAAATAATTCATGTGAACTAGACAAGTGTGTTAAGAGTGA 1276
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Qy       1277 TAAGTAAAATGCACGTGGAGACAAGTGCATCCCCAGATCTCAGGGACCTCCCCCTGCCTG 1336
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Db       1257 TCACCTGGGGAGTGAGAGGACAGGATAGTGCATGTTCTTTGTCTCTGAATTTTTAGTTAT 1316

Qy       1397 ATGTGCTGTAATGTTGCTCTGAGGAAGCCCCTGGAAAGTCTATCCCAACATATCCACATC 1456
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Db       1377 TTATATTCCACAAATTAAGCTGTAGTATGTACCCTAAGACGCTGCTAATTGACTGCCACT 1436

Qy       1517 TCGCAACTCAGGGGCGGCTGCATTTTAGTAATGGGTCAAATGATTCACTTTTTATGATGC 1576
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Qy       1577 TTCCAAAGGTGCCTTGGCTTCTCTTCCCAACTGACAAATGCCAAAGTTGAGAAAAATGAT 1636
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Qy       1637 CATAATTTTAGCATAAACAGAGCAGTCGGCGACACCGATTTTATAAATAAACTGAGCACC 1696
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Db       1797 GACTCAGCTGGGGTGATTTCGCCCCCCATCTCCGGGGGAATGTCTGAAGACAATTTTGGT 1856

Qy       1937 TACCTCAATGAGGGAGTGGAGGAGGATACAGTGCTACTACCAACTAGTGGATAAAGGCCA 1996
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Qy       2057 GAAGTGTCAACTGTGTCAGGACTAAGAAACCCTGGTTTTGAGTAGAAAAGGGCCTGGAAA 2116
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy       2117 GAGGGGAGCCAACAAATCTGTCTGCTTCCTCACATTAGTCATTGGCAAATAAGCATTCTG 2176
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Qy       2657 TCGTTCAAGAGAATGATTAAATATACATTTCCTA 2690
             |||||||||||||||||||||||||||||||||
Db       2577 TCGTTCAAGAGAATGATTAAATATACATTTCCTA 2610
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Martinell whose telephone number is (571) 272-0719.

The examiner works a flexible schedule and can be reached by phone and voice mail. Alternatively, a request for a return telephone call may be e-mailed to james.martinell@uspto.gov. Since e-mail communications may not be secure, it is suggested that information in such requests be limited to name, phone number, and the best time to return the call.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla, can be reached on (571) 272-0735.

OFFICIAL FAX NUMBER

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any Official Communication to the USPTO should be faxed to this number.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

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For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

/James Martinell/
Primary Examiner
Art Unit 1634